

**RAILWAY WHEELS RESISTANT TO MARTENSITE  
TRANSFORMATION**

**ABSTRACT**

5       Steels having a pearlitic structure and  
containing 0.60 to 1.0 weight percent carbon, 1.1 to  
3.0 weight percent silicon, 0.45 to 0.85 weight  
percent manganese, less than 0.050 weight percent  
sulfur and less than 0.050 weight percent  
phosphorus, with the remainder of said steel being  
10       iron and incidental impurities, can be used to make  
railway wheels that are resistant to martensite  
transformations and, hence, spalling. The addition  
of 0.50 to 1.0 weight percent chromium to such  
steels further improves their resistance to  
15       spalling.